respectively. Hypoparathyroidism’s etiologies were: autoimmune polyendocrine syndrome (2 cases), idiopathic hypoparathyroidism (3 cases), karensay syndrome (1 case). PHP was diagnosed in 3 cases; among them, 2 children had Fahr syndrome. All patients were treated with oral calcium, active vitamin D. 2 patients died; the cause of death was not related to their HP.

**Conclusion** HP is a rare endocrinopathy in childhood. The etiological diagnosis strategy needs many investigations especially genetic analysis.

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**BONE MINERAL DENSITY IN CHILDREN WITH CEREBRAL PALSY**

**Method** 85 children with CP were recruited in Tabriz Children Teaching Centre. Patients’ BMD of three lumbar vertebrae (L2–L4) and hip was determined by Dual energy X-ray Absorptiometry (DXA). Functional status was assessed by the Gross Motor Functional Classification (GMFC) scale. Eighty-five patients, 44 males and 41 females with a mean age of 5.79±2.39 (3–11) years were enrolled in the study. Reduced BMD, Z score < –2 were present in 48.2% and 30.6% of patients, respectively. Standing ability and its duration was directly associated with increased lumbar vertebral BMD. The mean hip BMD was significantly lower in the cases with positive history of receiving anti-convulsant medications. The mean lumbar vertebral and hip BMDs were higher in cases with hypotonic CP and in the patients with hemiplegic involvement in a nonsignificant manner. There was also nonsignificant inverse correlation between the BMD and GMFC.

**Discussion** Diminished bone mineral density (BMD) is a frequent finding in cerebral palsey. The underlying pathophysiology is complex in CP and variable risk factors such as immobility, nutritional deficiency and anticonvulsant use have been proposed. This study aimed at assessing BMD in children with CP.

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**Conclusion** In CP, adjuvant therapy with Vitamin A and iron in combination with GnRH agonist could be considered to improve height velocity.

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**VITAMIN A AND IRON AS AN ADJUVANT THERAPY IN ADDITION OF GNRH AGONIST IN PRECOCIOUS PUBERTY**

**Method** 85 children with CP were recruited in Tabriz Children Teaching Centre. Patients’ BMD of three lumbar vertebrae (L2–L4) and hip was determined by Dual energy X-ray Absorptiometry (DXA). Functional status was assessed by the Gross Motor Functional Classification (GMFC) scale. Eighty-five patients, 44 males and 41 females with a mean age of 5.79±2.39 (3–11) years were enrolled in the study. Reduced BMD, Z score < –2 were present in 48.2% and 30.6% of patients, respectively. Standing ability and its duration was directly associated with increased lumbar vertebral BMD. The mean hip BMD was significantly lower in the cases with positive history of receiving anti-convulsant medications. The mean lumbar vertebral and hip BMDs were higher in cases with hypotonic CP and in the patients with hemiplegic involvement in a nonsignificant manner. There was also nonsignificant inverse correlation between the BMD and GMFC.

**Discussion** Diminished bone mineral density (BMD) is a frequent finding in cerebral palsey. The underlying pathophysiology is complex in CP and variable risk factors such as immobility, nutritional deficiency and anticonvulsant use have been proposed. This study aimed at assessing BMD in children with CP.
Fluorescence in situ hybridization study that revealed a deletion on chromosome 22q11.2 zone. Therapy with calcium was undertaken at first by intravenous infusion and orally afterwards; high levels of calcium were needed to normalize serum calcium.

Molecular evaluation of the parents showed no deletion in the 22q11.2 zone, allowing for the diagnosis of a de novo deletion in the index case.

The importance of this report relies on the fact that the patient, despite clinical suspicions of VCFS, remained asymptomatic until late childhood, presenting with no renal dysfunction, immunological abnormalities or cardiac malformations.

Considering this hypothesis and making an early diagnosis is important both for implementing timely clinical evaluation and dietary supplementation if needed and for family planning.

Abstract 665

Consistent with RA. She received prompt intravenous antibiotic therapy with no clinical improvement. Only repeated accurate physical examinations, with early appreciated of subsequent clinical findings consistent with KD, allowed for early diagnosis and proper treatment with intravenous immunoglobulin. In literature sixteen cases of KD mimicking RA have been reported. Fever and deep neck infection like symptoms were the only clinical findings at admission in 14 (87.5%) children. All children had a neck CT scan performed showing findings suggestive of RA. All children were promptly started intravenous antibiotic therapy without clinical improvement and five patients (31%) underwent unproductive surgical drainage of the retropharyngeal space. Twelve patients (80%) received a diagnosis of KD after 7 or more days since onset of fever and 4 after 10 or more days. Coronary aneurysms were found in 2 patients, both of whom had a delayed KD diagnosis after 10 or more days since fever onset.

Conclusion

Pediatricians should be aware of atypical KD presentations mimicking RA. Early diagnosis of KD is pivotal for preventing cardiac complications, as well as avoiding the risk associated to unnecessary surgical intervention.

Abstract 666

Background and Aims Few studies are available on pulmonary function abnormalities in children with diabetes with controversial results. Spirometric abnormalities and reduction of lung diffusing capacity for carbon monoxide (DLCO) have been reported. A cross sectional study was designed to assess whether children and adolescents with type 1 diabetes have pulmonary dysfunction.

Kawasaki disease (KD) is an acute self-limiting vasculitis of childhood of unknown etiology. We report the case of a patient with KD whose initial presentation mimicked a retropharyngeal abscess (RA) and review the literature on this topic. Our child, a 4 year old girl, presented with fever (< 24 hours) and clinical, laboratory and MRI findings.